WHAT IS CLAIMED IS:

1. For use in a fusing station of an electrostatographic machine, an elastically deformable fusing-station roller, said fusing-station roller comprising:

a core member, said core member being rigid and having a cylindrical outer surface;

a base cushion layer, said base cushion layer formed on said core member;

a protective layer coated on said base cushion layer;

wherein said base cushion layer is a thermally cured polyorganosiloxane material made at an elevated temperature by a condensation-polymerization of an uncured formulation;

wherein said uncured formulation includes microsphere particles, said microsphere particles having flexible walls;

wherein said microsphere particles have a predetermined microsphere concentration in said uncured formulation; and

wherein said uncured formulation further includes solid filler particles.

2. The fusing-station roller of Claim 1, wherein a type of solid filler particles includes strength-enhancing filler particles.

3. The fusing-station roller of Claim 2, wherein said strength-enhancing filler particles are members of a group including particles of silica, zirconium oxide, boron nitride, silicon carbide, and tungsten carbide.

4. The fusing-station roller of Claim 2, wherein said strength-enhancing filler particles have a concentration in said uncured formulation in a range of approximately between 5% - 10% by weight (w/w).

5. The fusing-station roller of Claim 1, wherein a type of solid filler particles includes thermal-conductivity-enhancing filler particles.

6. The fusing-station roller of Claim 5, wherein said thermal-conductivity-enhancing filler particles are selected from a group including particles of aluminum oxide, iron oxide, copper oxide, calcium oxide, magnesium oxide, nickel oxide, tin oxide, zinc oxide, graphite, carbon black, and mixtures thereof.

7. The fusing-station roller of Claim 5, wherein said thermal-conductivity-enhancing filler particles have a concentration in said uncured formulation in a range of approximately between 40% - 70% by weight (w/w).

8. The fusing-station roller of Claim 1, wherein said microsphere particles which are included in said uncured formulation are hollow microballoons, said hollow microballoons distinguishable by at least one size.

9. The fusing-station roller of Claim 8, wherein said hollow microballoons have diameters of up to approximately 120 micrometers.

10. The fusing-station roller of Claim 8, wherein said hollow microballoons included in said uncured formulation have a concentration by volume in a range of approximately between 30% - 90%.

11. The fusing-station roller of Claim 1, wherein said microsphere particles are unexpanded microspheres, said unexpanded microspheres being expanded to hollow microballoons during said condensation-polymerization at said elevated temperature.

12. The fusing-station roller of Claim 11, wherein said hollow microballoons have at least one distinguishable size.

13. The fusing-station roller of Claim 1, wherein said predetermined microsphere concentration is in a range of approximately between 0.25% - 4.0% by weight (w/w) in said uncured formulation.

14. The fusing-station roller according to Claim 1, wherein said elevated temperature exceeds about 180°C.

15. The fusing-station roller of Claim 1, wherein said flexible walls of said microsphere particles comprise a polymeric material, said polymeric material polymerized from monomers selected from the following group of monomers: acrylonitrile, methacrylonitrile, acrylate, methacrylate, vinylidene chloride, and combinations thereof.

16. The fusing-station roller of Claim 1, wherein said flexible walls of said microsphere particles include finely divided particles selected from a group including inorganic particles and organic polymeric particles.

17. The fusing-station roller according to Claim 1, wherein said base cushion layer comprises a highly cross-linked polydimethylsiloxane.

18. The fusing-station roller of Claim 17, wherein a thickness of said base cushion layer is in a range of approximately between 0.1 inches - 0.2 inches.

19. The fusing-station roller of Claim 17, wherein said fusing-station roller is a fuser roller, said fuser roller being internally heated.

20. The fuser roller of Claim 19, wherein said thermal conductivity of said base cushion layer is in a range of approximately between 0.08 BTU/hr/ft/°F - 0.7 BTU/hr/ft/°F.

21. The fuser roller of Claim 20, wherein said thermal conductivity of said base cushion layer is in a range of approximately between 0.2 BTU/hr/ft/°F - 0.5 BTU/hr/ft/°F.

22. The fuser roller of Claim 19, wherein a thickness of said base cushion layer is in a range of approximately between 0.03 inches - 0.3 inches.

23. The fuser roller of Claim 19, wherein a Shore A durometer of said base cushion layer is in a range of approximately between 30 - 75.

24. The fuser roller of Claim 23, wherein a Shore A durometer of said base cushion layer is in a range of approximately between 50 - 70.

25. The fusing-station roller of Claim 17, wherein said fusing-station roller is a pressure roller.

26. The pressure roller of Claim 25, wherein a thermal conductivity of said base cushion layer is in a range of approximately between 0.1 BTU/hr/ft/°F - 0.2 BTU/hr/ft/°F.

27. The pressure roller of Claim 25, wherein a thickness of said base cushion layer is in a range of approximately between 0.01 inches - 0.3 inches.

28. The pressure roller of Claim 25, wherein a Shore A durometer of said base cushion layer is in a range of approximately between 30 - 50.

29. The fusing-station roller according to Claim 1, wherein said protective layer comprises a chemically unreactive, low surface energy, flexible, polymeric material suitable for high temperature use.

30. The fusing-station roller according to Claim 29, wherein:

said protective layer is a gloss control layer;

a thermal conductivity of said gloss control layer is in a range of approximately between 0.07 BTU/hr/ft/°F - 0.11 BTU/hr/ft/°F; and

a thickness of said gloss control layer is in a range of approximately between 0.001 inches - 0.004 inches.

31. The fusing-station roller of Claim 30, wherein said gloss control layer comprises a fluoropolymer.

32. The fusing-station roller of Claim 31, wherein said fluoropolymer is a random copolymer, said random copolymer made of monomers of vinylidene fluoride (CH_2CF_2), hexafluoropropylene ($CF_2CF(CF_3)$), and tetrafluoroethylene (CF_2CF_2), said random copolymer having subunits of:

$—(CH_2CF_2)x—$, $—(CF_2CF(CF_3))y—$, and $—(CF_2CF_2)z—$;

wherein;

x is from 1 to 50 or from 60 to 80 mole percent of vinylidene fluoride;

y is from 10 to 90 mole percent of hexafluoropropylene;

z is from 10 to 90 mole percent of tetrafluoroethylene; and

x + y + z equals 100 mole percent.

33. The fusing-station roller of Claim 32, wherein:

said gloss control layer comprises a particulate filler;

said particulate filler has a particle size in a range of approximately between 0.1 μm - 10 μm;

said particulate filler has a total concentration in said gloss control layer of less than about 20% by weight;

said particulate filler includes zinc oxide particles and fluoroethylenepropylene resin particles;

said zinc oxide particles have a concentration in a range of approximately between 5% - 7% by weight (w/w); and

said fluoroethylenepropylene resin particles have a concentration in a range of approximately between 7% - 9% by weight (w/w).

34. The fusing-station roller according to Claim 1, wherein said solid filler particles have a mean diameter in a range of approximately between 0.1 micrometers - 100 micrometers.

35. The fusing-station roller according to Claim 34, wherein said solid filler particles have a mean diameter in a range of approximately between 0.5 - 40 micrometers.

36. For use in a fusing station of an electrostatographic machine, an elastically deformable fusing-station member, said elastically deformable fusing-station member comprising:

a substrate;

a base cushion layer, said base cushion layer formed on said substrate;

a protective layer coated on said base cushion layer;

wherein said base cushion layer is a thermally cured polyorganosiloxane material made by a condensation-polymerization of an uncured formulation;

wherein said uncured formulation includes microsphere particles, said microsphere particles having flexible walls;

wherein a form of said microspheres includes at least one of a pre-expanded microballoon form and an unexpanded microsphere form;

wherein said microsphere particles have a predetermined microsphere concentration in said uncured formulation; and

wherein said uncured formulation further includes solid filler particles.

37. The elastically deformable fusing-station member of Claim 36, wherein said condensation-polymerization of said uncured formulation is carried out at an elevated temperature exceeding 180°C.

38. A method of making a fusing-station member for use in a fusing station of an electrostatographic machine, said fusing-station member formed from a substrate, a base cushion layer adhered to said substrate, and a protective layer coated on said base cushion layer, said method comprising the steps of:

mixing of ingredients so as to produce an uncured formulation, said ingredients including: a silanol-terminated polyorganosiloxane, about 0.2% - 0.5% by weight of dibutyl-tin-diacetate catalyst, microsphere particles, strength-enhancing solid filler particles, and thermal-conductivity-enhancing solid filler particles, wherein said microsphere particles have a concentration in said uncured formulation of about 0.25% - 4% by weight (w/w);

degassing said uncured formulation;

contacting said substrate with a thermally curable layer of said uncured formulation, said substrate priorly coated with a uniform coating of an adhesive primer, said contacting coincident with forming said thermally curable layer with a uniform thickness on said substrate;

ramp heating said thermally curable layer and said substrate from a room temperature to an elevated temperature, said elevated temperature exceeding about 180°C;

continuing to heat said thermally curable layer and said substrate at a temperature exceeding 180°C until said thermally curable layer is fully cured via a condensation-polymerization reaction;

cooling said thermally curable layer and said substrate to a room temperature so as to obtain said base cushion layer as a condensation-polymerized layer adhered to said substrate; and

coating said protective layer on said base cushion layer.

39. The method according to Claim 38, wherein said silanol-terminated polyorganosiloxane is a silanol-terminated polydimethylsiloxane which includes silanol pendant side chains.

40. The method according to Claim 38, wherein said microsphere particles are unexpanded microspheres, said unexpanded microspheres expanded to microballoons during said ramp heating and continuing to heat said thermally curable layer and said substrate at a temperature exceeding 180°C.